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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,496

06/14/2006

Chad Daniel Lehman

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EXAMINER

FERGUSON, CHANTEL L

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

11/13/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/551,496	Applicant(s) LEHMAN, CHAD DANIEL	
	Examiner CHANTEL FERGUSON- GRAHAM	Art Unit 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>12/22/05 and 9/29/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Summary

1. This is the initial Office action based on the 10/551496 application filed June 14, 2006.
2. Claims 1-44 are pending and have been fully considered.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. 11 9(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claims 1-23 and 29-42, are rejected under 35 USC 103 (a) as being obvious over ORSING (US PATENT 4095957), and in view of AVEDIKIAN (US PATENT 4443227), and further in view of MATSUOKA (US PG PUB 20020172786), and as evidence by AKIYAMA (US PATENT 6159254).

Regarding claims 1-23 and 29-42, ORSING teaches a fuel element composition and methods. A granular charcoal fuel 15 (body of combustible material is of granular coal) that is impregnated with combustible fluids (col. 2 lines 15-17) comprising a mixture of hydrocarbons, such as paraffin (liquid fuel; liquid paraffin; flammable sealant) (col. 3 lines 29-30); and retaining both the fuel and the combustible fluid within the casting that is a flexible plastic sheet material 16, preferably of heat-sealable or thermoplastic material (resin) (thermoplastic elastomers) (evaporation inhibiting agent), such as polyethylene and polypropylene. Two superimposed sheets of thermoplastic film, sandwiching the fuel element and sealed together at their periphery 17 on all sides (col. 2 lines 18-28).

ORSING teaches a hydrocarbon paraffin mixture, however ORSING does not explicitly teach that the paraffin has C_9 to C_{13} ; however it is inherently taught by AKIYAMA et al. where he discloses a fuel content having 23 and less carbon atoms in the paraffin wax (col. 2 lines 9-10).

ORSING does not explicitly teach that the combustible material is compressed, a hydrocarbon wax, immersing a body of combustion material for a period of between twenty seconds and four minutes, combustible material is in a bath of molten hydrocarbon wax composition, thermoplastic elastomer is a rubber-styrene copolymer, that rubber is selected from polyethylene/propylene, and a paraffin wax/resin blend.

However AVEDIKIAN and MATSUOKA et al. do.

AVEDIKIAN teaches a solid fuel charcoal briquettes which are compressed from solid carbonaceous fuel (col. 1 lines 5-12). Impregnation of charcoal briquettes may be accomplished by immersing the charcoal briquettes into a molten bath of impregnation (disposed beneath the surface of the body) liquid for a fraction of one minute, or a few

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seconds. Paraffin wax (paraffin wax) (hydrocarbon wax) also makes up the impregnation liquid (col. 3 line 39 – col. 4 line 35).

MATSUOKA et al. teaches a resin molded article with thermoplastic resin. These resins can be used as mixtures consisting of two or more, such as polyethylene and polypropylene, polystyrene, block copolymers of conjugated dianes with vinylaromatic hydrocarbons (rubber-styrene) (paragraph 23-40); which is 20 to 80 % weight of polyolefin (33% by mass of styrene) (paragraph 54). The resin-molded article (evaporation inhibiting agent) contains fillers such as bentonite and clay; two or more of these fillers can be jointly used (paragraph 68).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the method and composition of the solid fuel element of ORSING; by incorporating the solid fuel charcoal briquettes which are compressed from solid carbonaceous fuel and immersing the charcoal briquettes into a molten bath of impregnation as taught by AVEDIKIAN, and the resin molded article with thermoplastic resin as taught by MATSUOKA et al.

The motivation would have been to provide an improved instant charcoal briquette formed by impregnating a combustion charcoal briquettes (**abstract**) as taught by AVEDIKIAN.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

7. Claims 24-28 and 43-44, are rejected under 35 USC 103 (a) as being obvious over ORSING (US PATENT 4095957), and in view of GILCHRIST (US PATENT 3208520), and further in view of LASKOWSKI (US PATENT 5819945).

Regarding claims 24-28 and 43-44, ORSING does not teach reduce pressure prior to immersing and increased pressure thereafter; nor does he teach that the pressure is between 96kPa – 99kPa and 136kPa – 140kPa.

However GILCHRIST and LASKOWSKI et al. do.

GILCHRIST teaches a granular solid obtained by a particle form process in a low pressure polymerization process in suspension (col. 8 Lines 6-13).

LASKOWSKI et al. teaches in the method, the mixture can be fed to the dense medium cyclone at an inlet pressure from about 40 kPa to about 400 kPa (reduced pressure of between 96kPa and 99kPa; increased pressure of between 136kPa and 140kPa) (col. 4 lines 55-57).

At the time of the invention, it would have been obvious to one of ordinary skill in the art to modify the method and composition of the solid fuel element of ORSING; by incorporating the low pressure process as taught by GILCHRIST and the method of LASKOWSKI et al.

The motivation would have been to provide a fuel element that is easier to handle and use as taught by ORSING.

Therefore, the invention as a whole would have been *prima facie* obvious to one of ordinary skill in the art at the time the invention was made.

Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHANTEL FERGUSON-GRAHAM whose telephone number is (571)270-5563. The examiner can normally be reached on M-Th 8:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Chantel Ferguson-Graham
Chemical Examiner
Art Unit 1797

//Cephia D. Toomer//

Primary Examiner, Art Unit 1797